



2020 European Semester: Country Reports
– *Summary of Comments on Housing*

Country	Key Housing Issues
Austria	<ul style="list-style-type: none"> - House prices have been increasing strongly (especially in Vienna), but remain anchored by strong social housing sector and rent controls - Building activity picking up, which should help to tackled current excess demand for residential property
Belgium	<ul style="list-style-type: none"> - Belgium has significant investment needs in social housing - Deteriorating mortgage credit standards pose a potential risk to macroeconomic stability - Significant investment will be needed in the housing stock to increase the chance of reaching environmental targets
Czech Republic	<ul style="list-style-type: none"> - Rising property prices are negatively impacting on affordability, while the market may be slightly overvalued - Funding schemes are in place to expand the social housing stock, though activity has thus far been limited
Denmark	<ul style="list-style-type: none"> - The taxation system seems to encourage home-ownership, which has seen Danish households acquire large amounts of debt - Cost of housing is high relative to household disposable income and EU norms
Estonia	<ul style="list-style-type: none"> - Strong construction sector activity and adequate supply have contained price increases - Estonia will require significant investment in upgrading the energy performance of its residential stock
Finland	<ul style="list-style-type: none"> - Strong regional disparities in housing investment and demand based on increased urbanisation of the population - Household debt is high, potentially posing some systemic risks, but banks look to be well capitalised
France	<ul style="list-style-type: none"> - Supply of social housing is declining, as financing reduced – 2.1 million households on social waiting lists in 2018 - Substantial investment needed to reach ambitious climate targets, including in the housing stock
Germany	<ul style="list-style-type: none"> - The lack of affordable housing has become a major challenge, with the housing cost overburden rate one of the highest in the EU - Indicators of overvalued market in some larger cities - Investment in new construction not sufficient to meet underlying demand
Ireland	<ul style="list-style-type: none"> - Residential construction has been strong in recent years, but housing completions still fall short of demand - There are 68,000 households on social housing waiting list; there are 10,000 high need homeless people - A significant amount of the social housing currently being delivered comes in the form of payments to private landlords, likely pushing up private rental prices
Italy	<ul style="list-style-type: none"> - Access to affordable and adequate housing remains challenging due to the limited public investment in the housing sector - Italy performs well in a number of areas in relation to the environment, though it needs to be more proactive in relation to the energy transition of the household sector
Luxembourg	<ul style="list-style-type: none"> - Housing prices continue to increase, driven by the large gap between demand and supply - Housing costs represent an important burden for the most disadvantaged. In 2017, the share of housing expenditures in disposable income of the 20% most disadvantaged households (first income quintile) was 42% - The Luxembourg government plans to review the legislative framework regarding social and affordable housing to make it easier for municipalities and social housing bodies to use public land to build new units.
Netherlands	<ul style="list-style-type: none"> - Mortgage interest deductibility continues to fuel household debt. High household debt makes households vulnerable to shocks with macroeconomic repercussions. Although the ratio of household debt to GDP has been falling, it is still twice the euro area average - There is a squeezed middle group of households who do not qualify for social housing and who find it difficult to purchase housing. The relatively small size of the private rental market puts them under further pressure
Poland	<ul style="list-style-type: none"> - While house prices are now rising quite strongly, solid wage growth in recent years means they remain generally affordable - Poland's low level of household debt means that the mortgage market doesn't seem to pose much in the way of systemic risk
Slovenia	<ul style="list-style-type: none"> - The strong increase in house prices since 2016 has been mainly driven by the lack of supply of residential buildings
Spain	<ul style="list-style-type: none"> - Growth in house prices has also started to moderate, but it varies greatly across regions, with larger increases in the major cities and the coastal areas - The recovery of house prices does not seem to imply potentially harmful dynamics, but price developments in some regions deserve attention, raising concerns about affordability
Sweden	<ul style="list-style-type: none"> - There is a persistent housing shortage due to demographic developments, insufficient new housing construction and inefficient use of the existing housing stock - Sweden has experienced increased wealth inequality and, in particular, housing wealth inequality - The demand for affordable housing is growing. In 2019, 240 municipalities (of 290) had a housing shortage, particularly for low-income households in the rental sector
United Kingdom	<ul style="list-style-type: none"> - Annual net housing supply has continued to rise but planning permissions have levelled off and there are signs of a slowdown in new housing starts - The Commission estimates that, on average, UK housing is around 20% overvalued – though there are often large regional disparities, meaning some areas are seriously overvalued - Households account for 18% of emissions in the UK, though steps are being taken to address this as part of a larger overall effort on climate change

Austria

- **Prices and rents are growing strongly, but housing remains comparatively affordable;** risks in the banking sector are contained. Despite rising housing prices and rents, Austria's subsidy scheme and elaborate system of limited-profit housing associations keep costs relatively low – p.5
- GDP growth has outpaced the growth of household incomes from 2010 to 2018 and gross disposable household incomes were still below the pre-crisis levels in 2018, calling the inclusiveness of the economic recovery into question. In addition, **Austria ranks high in terms of inequality based on net wealth, mainly due to low house-ownership rates** at the bottom of the wealth distribution – p.9
- **House prices have been growing strongly, driven mostly by developments in Vienna.** In the past decade, Austria has seen repeated house price surges, leading to the strongest price rises in the euro area relative to a low pre-crisis levels. This can be mainly attributed to an accumulation of excess demand (higher demand than supply), also due to the low interest rate environment. The rises were driven mostly by the capital, Vienna, where prices have doubled over the past decade. However, between 2015 and 2018, prices also grew strongly in other regions, reducing slightly the gap between Vienna and the rest of the country. Risks to the banking sector stemming from the increasing exposure of banks to the real estate sector seem contained so far, but **parallel increases in rents put pressure on the affordability of housing** – p.10
- **Private households produced about 18% of total CO2 emissions** through heating and transport - p.21
- **Excess demand for housing appears to have peaked in 2016, as building permits and construction picked up.** After peaking in 2016, increased construction activity and weaker demand are expected to eliminate excess demand by 2020, though it may take longer in Vienna. This is also visible in the strong increase in the number of building permits issued in 2016 (+16.9%) and 2017 (+10.2%). While growth in the demand for building permits fell strongly in 2018 (-16.9%), it was still high (70,000 permits). First estimates for 2019 show stable development – p.30
- **Most indicators suggest that house prices are overvalued by 10% or more.** Several assessment indicators suggest an average house prices overvaluation of 10-14%. As prices have increased more than income, the price to income ratio is 29% (Q3 2019) above its long-term average and among the highest in the euro area...A key difference from other euro area markets is that rents also increased strongly. This has affected the affordability of housing. However, the price to rent ratio is only 15% (Q3 2019) above its long-term average and the model-based methods point to a rather low valuation gap. Risks to the banking sector seem contained – p.30
- **Austria has an elaborate system of limited-profit housing associations and a subsidy scheme that keeps housing costs relatively low.** The housing and rental market is characterised by a low home ownership rate (48%), combined with a well-established system of social housing, which usually provides accommodation at prices below market rents. Only 18% of households live in a private rented property, 17% in Limited Profit Housing Association (LPHA) properties and 7% in municipal housing. The remaining 9% live in dwellings with other forms of housing contracts. Together with the legal framework, the building and loan association and housing subsidies, **the social housing scheme is a powerful tool to increase economic and social resilience by stabilising the housing and construction sector.** It also enables political intervention, e.g. fostering investment in the energy efficiency of buildings. However, a dearth of available

dwellings and long waiting lists, together with often-substantial entry costs in the case of LPHAs, may de facto limit access for people at risk of poverty – p.35

- **Rising rental costs make it more difficult to access affordable housing.** Rents increased by 13% between 2014 and 2018, especially on the private market. While the overall incidence of housing cost overburden is relatively low (AT: 6.8%; EU average: 9.9%, 2018), there are substantial regional disparities. This affects mostly people living in cities (11.6%). **The housing cost overburden rate for people at risk of poverty is 36.5%** and even higher for those aged 16 to 29 (AT: 44.8%; EU: 40.4%) – p.35

Belgium

- Belgium has significant **investment needs in...social housing** – p.4
- Wage and labour costs are expected to continue to grow moderately in the coming years. Combined with a drop in unemployment, wage increases are expected to **support growth in households' disposable income**, which has been sluggish in recent years – p.4
- Belgium's commitment to **fully phasing out nuclear energy by 2025** means there is a need for major investment in power generation, as well as interconnection capacity, smart grids and storage...Renovating the old building stock, which predates the introduction of energy norms, will help Belgium meet its 2020 and 2030 emission reduction targets. – p.4
- Banks' **vulnerabilities in relation to the residential real estate market** have deepened in a context of deteriorating credit standards and rising household debt. Faced with intense competition...banks have loosened their credit standards to increase lending volumes. The National Bank of Belgium has urged the financial sector to exercise more caution in granting risky mortgage loans – p.7
- Large public and private investment needs have been identified and will be required to adapt mobility solutions, energy production and housing quality. Despite proactive policies, **the building sector is responsible for a fifth of emission in Belgium**, notably due to the old age of the building stock and still low renovation rates – p.7
- **Housing prices have increased moderately in recent years.** Real house prices, as measured by the house price index, have increased by 1.1% year-on-year as of 2019 Q2, broadly in line with their evolution in recent years (1.2% per year since 2015). This moderate expansion follows a period of strong growth of about 5% per year from 1998 to 2007. Over the past few years, Belgian housing prices have grown much more slowly than those in neighbouring countries. Nevertheless, some indicators point to overvaluation risks in the Belgian residential real estate market – p.12
- Between 2000 and 2018, the **average amount borrowed for the purchase of a house** increased from less than €75,000 to nearly €160,000 – p.33
- The current tax rules governing housing contribute to **overinvestment in real estate** as compared to other types of investment...While mortgage tax deductibility for primary residences is now abolished in all regions except Wallonia, it still applies for secondary residences and rented housing. In addition, **income from rented housing benefits from a favourable tax treatment as compared to income from other types of investment.** Rental income from housing property located in Belgium is taxed based on the outdated cadastral income (indexed value of 1975 estimated income), which is on average substantially lower than the actual rental income received. Calculation by the European Commission's Joint Research Centre have estimated that taxing the net rental income would have a positive budgetary and redistributive impact – p.28
- **Social housing remains a concern, in particular for those on the private rental market.** About 8.6% of the population spends 40% or more of its household income on housing, which is below the EU average of 10.4%. However, there are large differences between regions and population groups.

The housing cost overburden rate is higher for those renting on the private market (33.8% as compared to 27.4% for the EU average) and those living in Brussels. **There are long waiting lists for social housing in 2018.** In Brussels, the number of households on waiting lists even exceeded the actual available social housing stock. The government agreements of all federated entities have announced investments in social housing – p.45

- **In Brussels, for example, a 'Housing Emergency Plan' will be drawn up in 2020.** This plan aims to provide effective housing solutions for 15,000 households. It will consist of additional investments in social housing as well as extending the social rental agencies and providing housing allowances. In Flanders, the government proposes to introduce a residence requirement in the municipality (10 years of residence of which 5 years uninterrupted) for social housing. This condition risks reducing access for vulnerable groups, such as refugees, and having a negative impact on labour mobility – p.45
- Long delays to obtaining a building permit are a barrier to investment in construction, notably for the renovation of the existing housing stock. On national scale, the average number of permits issued per month has hardly increased since 2000 – p.59

Box 3.1.2: Unequal tax treatment of rental income taxation

Unlike in most EU Member States, rental income is taxed based on a fictitious amount rather than the received housing rent in Belgium. ⁽¹⁾ The tax treatment of rental income depends on the purpose for which the property is used. When immovable property is rented out for professional purposes, the actual rental income received is added to the personal income tax base. Related expenses are estimated to 40% of the rental income received and tax deductible. When immovable property is rented out for housing purposes, not the actual rental income but 140% of the indexed cadastral value (since 1991) is used to calculate the tax base. The cadastral value is on average approximately 20% to 25%² of the actual rental income received. Incurred related expenses are not tax deductible but a standard deduction of 40% applies.

A substantial amount of tax revenue is lost due to the current tax treatment of rental income. Based on EUROMOD, the budgetary and redistributive effect of the current tax treatment of housing rents was quantified by comparing it to a scenario in which households' actual rental income is subject to personal income tax. Results show that taxing actual rents under the personal income tax system, would generate additional tax revenue of approximately 0.15% of GDP on an annual basis.

Moreover, the overall distributional effects of the current tax system seem regressive³. Given that some properties are over-valued while others are under-valued, the use of outdated cadastral values also entails distributional concerns. Since high-income earners own relatively more immovable property than low-income earners, they benefit most from the favourable tax treatment of rental income. Moreover, given the progressive tax rate schedule in Belgium, they benefit proportionally more than high-income earners. Hence, taxing actual rental income would mainly affect the highest income groups.

Finally, the current tax treatment does not incentivise property owners to invest in the maintenance of their rented property. Currently only financing costs for acquiring rental housing can be deducted from the tax base. Other expenses related to the rental activity, like maintenance costs, are not tax deductible. Granting tax deduction to maintenance and renovation costs could stimulate the building sector. Moreover, it could help reduce the informal economy, as invoices would be needed for the tax deduction to apply. In addition, deductibility of renovation costs could improve the quality and the energy efficiency of the housing stock and help easing the energy transition.

Czech Republic/Czechia

- Despite slowing down, **rising house prices are making housing less affordable**. Various indicators suggest that the housing market is overvalued by 10-20%. Strong price growth is due to supply constraints coupled with an increasing demand for housing in large cities. A proposed new construction code may help simplify and accelerate construction-related procedures. Although the growth of the housing loan stock slowed in 2019, partly due to the implementation of the central bank's macroprudential recommendations, **rising property prices may be a risk to financial stability** in the medium term – p.4
- Housing prices continue to grow, reducing affordability. **Supply constraints and strong demand have been pushing house prices upwards, particularly in the biggest cities**. Although price growth flattened off in 2019, it remains above wage growth, reducing affordability. Burdensome planning procedures continue to limit housing supply, which is not expected to meet demand in the near future, despite an increase in construction – p.11
- Valuation indicators of the housing market suggest a positive and increasing valuation gap. According to the European Commission's internal calculations, **the housing market was overvalued by around 6% in 2018**. The widest gap relates to the price-to-income ratio, which was 11.4% higher than the long-term average (+1.7 percentage points compared to 2017) – p.21
- Due to the sustained price increase, affordability has worsened further. Deflated house prices have steadily outpaced real wage growth at an average rate of 2.1 pps per quarter since 2014, which has lowered affordability even in a context of declining borrowing costs. Alternative metrics also suggest a worsening of affordability—according to Deloitte's House Price Index, **Czechia has the lowest level of affordability in a sample of 12 EU countries, with 11.2 gross annual salaries needed to own a house**, up from 7 salaries in 2015...Affordability problems are most acute in Prague and other large cities – p.21
- Burdensome planning procedures continue to **limit housing supply**. According to the World Bank, 21 procedures need to be undertaken to receive a building permit in Czechia – p.21
- Several national and EU investment schemes are in place to enable municipalities to **enlarge their social housing stock**. However, the response from municipalities has so far been limited. After the social housing legislation was put on hold in 2018, the Ministry of Regional Development **began in 2019 to work on an Affordable Housing Act** – p.29

Denmark

- The high level of household debt combined with high house price levels and risky loan taking remains a **potential financial stability risk** – p.3
- Although housing price inflation is slowing, **the valuation of property prices still seems on the high side**. Housing prices have been easing in all regions and housing categories. A forthcoming new property taxation system, strong residential construction activity and already introduced macroprudential measures are expected to further curb housing price inflation, despite mortgage interest rates being at historical lows – p.5
- The **tax deductibility of mortgage interest payments encourages home ownership and indebtedness**. The tax deductibility of interest payments adds a dimension of debt bias to the tax system, which fosters house ownership and by extension household indebtedness. Abandoning the tax deductibility of interest rates and compensating with an increase in the overall personal income tax allowance would change these incentives and make the Danish tax system more progressive and less biased towards homeowners – p.5-6

- **House prices are slightly overvalued and household indebtedness exceeds prudential and fundamental benchmarks**, though several policy measures were introduced to increase the resilience of Danish financial sector and households – p.11
- A 2017 reform will re-align property taxes with actual property values by 2021, also better addressing **regional house price divergences**, although the new valuation system behind the property tax reform has been delayed – p.15
- While progress with administrative reform is visible in some areas, challenges remain in others. **A much-needed modernisation of the property tax system planned for 2021 has been delayed to 2024**, because of continued IT development challenges within the Danish tax administration. The development of a new IT system was markedly behind schedule, implying that any entry into operation of the new system from 2021 was considered unfeasible and could lead to additional challenges for the already-troubled housing evaluation system and the linked taxation system – p.20
- Danish government debt is low in comparison with most Member States...**A change of the financing model for social housing** could however result in a slower pace of gross debt reduction – p.19
- Increases in the price-to-income and price-to-rent ratios above their long-term values **point to a marginal worsening of housing affordability over recent years**. House prices in Denmark, both at national and regional level appear broadly in line with fundamentals. This contrasts somewhat with price-to-rent or price-to-income indicators, which point to higher valuation gaps and pressures on housing affordability – p.24
- The **share of household expenditure devoted to housing stood at 28.1% in 2018**, the second highest in the EU (average of 24.0%). This indicator – which includes consumption on housing, water, electricity, gas and other fuels – has gradually declined since 2013 from 30.0%. Furthermore, **the housing cost overburden rate fell to 14.7% in 2018, but remains among the highest in the EU** (average of 10.4%). The limited supply of affordable housing solutions is of particular concern in the capital area, which also has the highest number of job vacancies. This may in turn hamper labour mobility and fuel geographical labour market and social disequilibria – p.31
- In December 2018, the initiatives from the political agreement "Denmark without parallel societies – no ghettos by 2030" went into force...A key element of the "ghetto plan" is the introduction of higher sanctions for committing crimes within these neighbourhoods, and **an upper limit of 40% social housing** has been introduced – p.32-33

Estonia

- **Estonia's construction sector has recovered given the buoyant demand for housing**. Construction increased by more than 70% since 2010, peaking in 2018-2019, while profitability of this activity also picked up considerably – p.8
- Demand for housing increased mainly in urban areas, and so far **Estonia does not seem to face particular housing supply shortages**, which helps to contain the upward pressure on house prices. House price increases have trended downwards to below 6% in the first half of 2019, with moderate growth in household debt - p.8
- However, the share of housing loans in the total assets of the banks operating in Estonia is almost twice the average level in the euro area. This makes the **banks vulnerable to any negative change on the real estate market** affecting loan servicing by households – p.22
- Having less carbon intensive transport and more energy efficient housing sectors will require considerable investment...**Estonia's consumption of energy in the housing sector is significantly higher than in many of the neighbouring Nordic and Baltic countries** with a similar climate. As the buildings stock is rather old, the energy demand for heating per surface area

in residential buildings is among the highest in the EU . **Even though investments to better insulate houses have been made** in recent decades, other factors such as more and larger dwellings, and more appliances per dwelling have actually led to **increased energy consumption in housing on the whole** – p.48

Finland

- **Household debt remains high but the banking sector is well capitalised.** Household debt, including through housing corporations, remains at historically high levels, supported by persistently low interest rates. The predominance of variable rates could create risks if interest rates rise in the medium term. Consumer credit is also rising. The lack of a comprehensive (positive) credit registry prevents banks from having a clear overview of households' overall debt. – p.6
- There is continued and growing disparity in house prices between the bigger cities and the rest of Finland. On a country level, by third quarter prices increased in nominal terms both for new buildings and existing housing stock, but deflated prices of existing housing stock were slightly lower than in 2018. However, prices in Helsinki and the bigger cities (where there is a net migration) are clearly rising faster than in the rest of the country. There is likely to be little price pressure, due to the construction of a high number of new buildings in recent years, which increased the stock of unsold dwellings. As indicated by the decreasing number of building permits and building starts, **it is likely that the supply of new dwellings will drop in 2020 and 2021**, putting more upward pressure on prices in the medium term – p.13
- Household debt to disposable income remains high, close to 140%, similarly to 2018. As in recent years, most of the credit stock, including new lending, is taken at variable rates, which makes borrowers vulnerable to potential rapid changes in the monetary policy stance – p.28
- **Income inequality remains among the lowest in Europe.** Relative spending on social protection is among the highest in the EU and has increased over recent years. In 2018, social transfers reduced the at-risk-of-poverty rate by 53.7% (compared to an EU average of 33.2%). On average, unemployment benefits have the largest impact on the at-risk-of-poverty rate, followed by family benefits, sickness and disability benefits, and housing benefits – p.35
- **Finland is currently meeting its 2020 energy efficiency target**, but its progress will have to be monitored in view of the 2030 target. The NECP envisages a very moderate decrease in final energy consumption as well as an increase in primary energy consumption for 2030...However, improving energy efficiency in the existing building stock consistently with the EU 2030 energy efficiency target will very likely require substantial investment, notably from households (see below under 'Low carbon and energy investment')...**Studies suggest that improving the energy efficiency of buildings could reduce total heating demand by half** – p.54

France

- **Access to social housing remains a challenge.** Although facing an increasing demand, **the supply of new social housing continues to decline.** Unmet demand for social housing is of particular concern for vulnerable groups such as single parent households that are more at risk of poverty. The 'Housing First' strategy rolled out by the government represents a positive step, yet remains limited in scope – p.7
- **While real house price growth has been very contained in France since 2011, some indicators continue to suggest risks of overvaluation.** This is due to the significant growth in the 2000s, which has yet to be undone. The European Systemic Risk Board has identified medium-term

vulnerabilities in the housing market in France as a source of systemic risk to financial stability, which could have negative effects on the real economy. However, the High Council for Financial Stability has not found evidence of possible risks associated with a potential fall in property prices. The reason being that 94.6% of outstanding loans at the end of 2018 are set at a fixed interest rate, which limits the impact of a potential rise in interest rates – p.14

- **The housing tax on the main home will be abolished** for all households and the financing of local authorities is reformed. In 2020, the housing tax will be entirely cut for 80% of households. The 20% richest households will cease to pay it in 2023, with a gradual decrease as of 2021 – p.34
- A plan to merge various benefits (activity premium, minimum income, **housing subsidies**) into one universal activity income (Revenu universel d'activité) is also underway. The scope of the new measure is still under discussion in the context of a public consultation that will end beginning of 2020 – p.43
- Since January 2019, €20mn have been allocated to guide and support homeless families in their social reintegration and €125mn to emergency housing facilities, guidance for families and assistance to homeless children – p.46
- Over the last three years, **the housing cost overburden declined on average, but overcrowding increased**. The share of rent in poor households' disposable income has slightly increased in 2018 (from 30.2% to 31.2%). The housing cost overburden for households at risk of poverty remained high but stable, at 20.3%, while it was only 4.3% for the overall population. The housing overcrowding rate grew from 7.5% to 8.2% for the overall population and from 24.4% to 25.9% for households at risk of poverty – p.46
- **Unmet demand for social housing remains an issue**. In 2018, 2.1 million households were on the social housing waiting list for renting social dwellings, of which 400,000 were already social housing tenants. Budget cuts led to lower investment and a reduced number of new units of social housing from 105,000 in 2017 to 98,000 in 2018 – p.46
- **The objective of the 2017 equality and citizenship law (*Egalité et Citoyenneté*), to have 25% of social housing attributed to individuals in the first income quartile is yet to be achieved**. In 2017, around 50% of social housing applicants were below the poverty threshold, with an over-representation of single-parents households among applicants. Access to social housing for most vulnerable groups remains particularly limited. This is a concern, as social housing plays an important role in shielding tenants from poverty. Among applicants, at least 5% are in a precarious housing and 2% are homeless. Their situation is particularly worrying in the context of an overall increase of the number of evictions, mostly due to unpaid rent. The lack of infrastructures may imply additional costs in the long run, as the emergency public support to homeless people costs significantly more than social housing – p.46
- Under its **housing first plan** (le logement d'abord) (2018-2022), the government supports access to housing for most vulnerable groups. This plan involves a shift from emergency housing towards increased investment in favour of social housing infrastructures targeting lowest income households (Prêt locatif Aide d'intégration, PLAI). However, the PLAI goal of 40,000 a year set by the government remains modest, particularly if the rent level is not sufficiently capped to remain affordable for the lowest income households – p.46
- **Substantial investment is needed to reach the ambitious climate targets**. The Institute for Climate Economics (I4CE) estimates that by 2023, an additional €15 to 18 bn of investments per year in housing (energy efficiency), renewable energy and clean transports are necessary to put France on a downward trajectory towards carbon neutrality – p.65

Box 4.5.8: Energy renovation of buildings

Final energy consumption fell by around 3.8% between 2012 and 2018 (-1.7% in climate-corrected terms), compared with a target of a 12.6% decrease between 2012 and 2023 in the 2018-2023 Multiannual Energy Plan adopted by France in 2017. Therefore, achieving the French energy efficiency targets for 2020 (i.e. about a 7.5% decrease of final energy consumption in 2020 compared to 2012) requires to strengthen efforts. The building and tertiary sectors represent 42% of final energy consumption. The building sector is the second largest emitter of greenhouse gas emissions after transport (respectively 23% and 40% of national emissions). The objectives set in the climate plan of July 2017 (500,000 renovations per year, including 150,000 thermal sieves) were not met in 2018 (estimates vary between 300,000 and 400,000). It is therefore necessary to change scale in terms of investments to achieve the required 'massification' of renovations. According to the French Institute for Climate Economics (I4CE), an additional €2 bn to €8 bn per year are required to renovate 500,000 buildings per year up to a 'low consumption' label.

The residential sector is the main market segment where increased efforts are most needed. For the tertiary sector, regulatory measures in place for buildings above 1000 m² should allow achieving the ambitious energy savings targets by 2030, 2040 and 2050 (respectively -40%, -50% and -60% compared to 2010). Underpinned by a fully internalised economic logic, the renovation of commercial buildings is currently the main driver for renovation in France.

The residential sector counts 30 million primary residences: 8 million shared properties, 5 million social **housings** and 17 million individual houses. Some 7 to 8 million homes fall into the energy F and G classes ('thermal sieves'), of which 1.5 million are inhabited by households in situation of energy poverty. The government created an observatory in September 2019 to centralise data and enable reliable monitoring.

Main pitfalls identified for deployment of investments include:

- The economic interest is not fully adopted by individuals (especially for deep renovations).
- Households who would most benefit from substantial renovations are usually those with limited resources.
- Available support schemes are scattered among various actors and hard to mobilise at once.
- Solutions are heterogeneous, suppliers numerous, and reported abuses have affected the level of trust.
- For rental property, asymmetric incentives between the landlords (who finance the investment) and the tenant (who stands to gain from the investment).

The government has focused its actions on the following:

- **Priority to low and middle-income households**, through the substitution of a tax credit by a premium, conditional to the level of income.
- **Enhanced coordination** by the constitution of a network of best practice and advisory services (Ease, accompany, inform on energy renovation, '*Faciliter, accompagner, informer pour la rénovation énergétique*', FAIRE), addressed to both customers and suppliers; financing is granted on a result-based basis for acts listed in the frame of the advisory services.
- **Budget increase and pooling of budget resources** into a single vehicle (Accompanying service for energy renovation, '*Service d'accompagnement à la rénovation énergétique*', the *SARE* programme) endowed with €200 mn over three years, compared to €60 mn in the previous period. It is coupled with a progressive shift from State budget (value-added tax reduction, tax credit) to off-balance sheet sources such as the energy savings certificates scheme.
- **Restore confidence in energetic renovation works**, by strengthening controls and sanctions for companies that realise aggressive door-to-door selling for insulation and heat systems replacements.

Other challenges identified include:

- **Deployment of banking solutions.** Until their simplification in 2019, current zero-rate loans for energy efficiency limited to €30,000 per house unit were hardly sold in the market, in a context of low interest rates. The instrument is not compatible with broader renovation investments needs (like extension and aesthetic works), nor it can be blended with standard mortgages into a single product, guaranteed by a material underlying asset (the property). Nevertheless, those loans are often joined with a loan for broader renovation investments and a guarantee fund was set up in 2019 for lower income households.
- **Support to alternative financing solutions.** Energy service companies offer long-term financing for energy efficiency investments, and are remunerated by energy savings from the beneficiaries. Their business model is particularly adapted to clients with strong balance-sheet records such as public authorities and corporates. However, current accounting rules applicable to investments in public buildings' renovation limits the access to and deployment of this market segment.
- **Delayed restrictions** for the rental of classes F and G homes, from 2023 for the less performing buildings (more than 500 or 600 kWh final energy/m²/year), and energetic renovation obligation for all F and G buildings as of 2028. However, the implementation of increased constraints from 2021 by the Energy and Climate Law is to be noted.

Germany

- **The lack of affordable housing has become a major challenge.** The housing cost overburden rate is one of the highest in the EU. House prices rose by half over the last decade, suggesting overvaluation in the bigger cities and an **increasing risk of a housing bubble**. Policy measures mitigate rental price increases, but do not keep pace with the demand for affordable housing. The annual target for new housing agreed on by the country's governing coalition was not met – p.7
- **Wealth inequality remains high:** in 2017, the richest 10% of households possessed around 55% of total net wealth, and the Gini coefficient for household net wealth was 74%. This was slightly below its value in 2014 (76%) but remained **well above the level for the euro area** as a whole (68.5% in

2014). The **uneven profile of property ownership** and steeply rising house prices are likely to have been strong contributing factors to this trend – p.11-12

- The **subdued net investment** share of GDP continues to put at risk Germany's future growth potential, and has implications for the euro area. **Private investment is lagging behind infrastructure and housing needs.** This is reflected in short-term pressures, observed for example through increases in house prices and rents – p.18
- House prices rose by half this decade, catching up after years of stagnation. Most of the available **residential real estate price indicators point to an overvaluation** in the bigger cities. Following a period of mainly nominal increases since 2000, real house price growth has accelerated in recent years, slightly outpacing the growth in household income. Today **house prices considerably exceed their long-term average**, compared to both rents and incomes, suggesting increasing risks of a housing bubble – p.35
- Housing investment is still **lagging behind housing needs** in metropolitan areas – p.51
- Estimates by authorities and NGO's still point to **a significant shortage of housing** in metropolitan areas despite booming construction activity. The Prognos Institute, for example, estimates that in 2017 alone supply was lower than demand by 90,000 units (or around 25%). **The largest discrepancy was in social housing, where only one-third of the demand could be accommodated** (Koch et al., 2019) – p.52
- **A constitutional amendment, which came into force in April 2019, allows the federal level to continue providing financial assistance for social housing to the Länder.** However, insufficient funding for social housing is only one obstacle. Ineffective regional supply strategies and poor framework conditions at the local level (lack of building land, lengthy planning procedures, lack of qualified staff, etc.) hamper the expansion of housing construction – p.52
- The housing shortage has put **upward pressure on housing rents.** In recent years, Germany has experienced strong increases in housing rental costs as recorded by the HICP – p.52

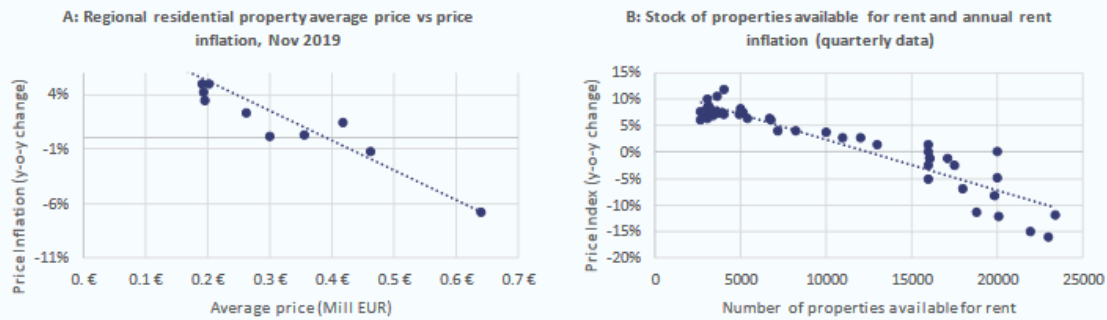
Ireland

- House price growth has slowed but **affordability remains a concern.** The fall in house prices at the top end of the market has brought annual residential price inflation down to levels not seen since 2013. **Prices in the rental sector are still growing fast**, due to insufficient, though increasing, housing supply – p.6
- **Housing scarcity remains a pressing issue**, including rising homelessness due to shortages of social housing. In November 2019, over 10,000 people were counted as homeless, including 3,752 children – p.11
- **Shortages in housing supply and social housing have created a challenging situation.** The rapid increase in the population of Ireland, along with increases in rental and residential property prices since 2013, have created affordability challenges, especially for households at the bottom of the income distribution. While the population of Ireland increased by around 150,000 people from 2011 to 2016, the housing stock increased only by 8,800 units. Residential construction has been strong in recent years, but housing completions still fall short of demand. **Social housing as a share of the total housing stock has increased** from 8.7% in 2011 to 9% in 2018. However, **this share is still 3.5 pps lower than the one in 1981.** In 2018, the share of under-occupied social homes was still relatively high – p.45-46

Box 3.1: Drivers of house and rental prices

House price growth has moderated sharply, despite persistent housing shortages. Annual housing completions in September 2019 (20,249 units) were still 16% below the lower demand estimates. While year-on-year growth in annual completions (19%) was still high, it moderated significantly compared with the same period in 2018 (33%). House price inflation also fell sharply from 13.3% in April 2018 to 1.4% in November 2019, which has improved affordability for house buyers. The slowdown was driven by the decline in house prices at the high end of the market (see Graph 3.2.A), where macroprudential rules ⁽¹⁾ have become more binding ⁽²⁾.

Graph 3.2: Housing prices developments



Source: CSO, daft and European Commission calculations

Designed to ensure financial stability, macroprudential rules may also have contributed to the slowdown in overall house price growth. Simulations with the European Commission's QUEST model, calibrated for Ireland, ⁽³⁾ show that setting a 10% tightening of the loan-to-value (LTV) ratio on mortgages granted to credit-constrained households (CCH) could help curb land and house price inflation. Not taking into account potential second round effects from increased financial stability, such as lower mortgage rates, the simulations suggest that stricter LTV limits could also reduce aggregate housing investment and thus the housing stock (see Table 3.1). These results are consistent with findings of other reports (Duffy et al., 2016).

Increasing housing construction might help ease inflation in the rental sector. Contrary to the trend of deceleration in overall house prices (see above), rental price inflation for new and renewed tenancies is still high (8.2% in the third quarter of 2019) and seems to be largely driven by the number of properties available for rent. A supply of 12,000 units per quarter, i.e. four times the supply reported in the first quarter of 2019, would be consistent with constant rental prices (see Graph 3.2.B). If the downward trend in house completion growth persisted, it might lead to an increase in rental inflation.

Table 3.1: Macroeconomic effects of loan-to-value ratio reduction

	Y1	Y2	Y3	Y4	Y5
House price	-0.5	-0.6	-0.6	-0.6	-0.5
Housing investment	-2.3	-2.2	-1.9	-1.7	-1.6
Housing stock	0	-0.1	-0.2	-0.3	-0.3
Land price	-1.1	-0.9	-0.8	-0.8	-0.9

(1) Table compares a baseline scenario with no measures to an alternative scenario with a 10% tightening of the LTV. The LTV applies only to credit-constrained households, who represent 50% of total households. This is an approximation to reality: 1) the LTV for first time buyers is 90% but for second and subsequent buyers is higher (80%) and 2) banks are allowed to grant part of the mortgages (20% for second and subsequent buyers and 5% for first time buyers above these limits).

(2) Results are expressed in %. A negative value does not mean that the variable in question will decrease in absolute terms, but rather that it will be lower in the scenario with the structural measure than in the baseline scenario.

Source: European Commission

The combination of macroprudential rules with policies boosting land availability could curb both house and rental price inflation. QUEST simulations of jointly applying a 10% tightening of the LTV ratio and a vacant site levy of 10% show that the levy could lead to higher land availability and lower land prices, thereby reducing the costs of housing supply and thus compensating for the potentially contractionary effects of stricter macroprudential measures (see Table 3.2).

Table 3.2: **Macroeconomic effects of loan-to-value ratio reduction combined with a 10% vacant site levy**

	Y1	Y2	Y3	Y4	Y5
House price	-2.9	-2.7	-2.1	-1.6	-1.1
Housing investment	-1.2	0.1	0.5	0.3	0
Housing stock	0	0	0	-0.1	0
Land price	-10	-8	-6.1	-4.3	-3.1

(1) See also the Notes under Table 3.1 to interpret this table.

(2) Given that the value of the LTV is an approximation of reality, the size of the vacant site levy required to neutralise the effect of macroprudential policies in housing stock might be more or less than 10%.

Source: European Commission

The vacant site levy, due in Ireland since January 2019, might require some refinement to increase its effectiveness. Sites registered as vacant in 2018, were subject to a 3% levy on their market value in January 2019, unless works had been activated in the interim. This levy is set to increase to 7% as of January 2020. In April 2019, 360 vacant sites were registered, 162 of them in Dublin. A number of local authorities reported difficulties in interpreting the law and identifying vacant sites, which might have left out of the register vacant sites with potential for housing development. Around 10% of the sites identified have already come off the register and started construction, which might indicate that the levy has the potential to incentivise housing supply, as suggested by the results of our QUEST model.

⁽¹⁾ Macroprudential measures were introduced in Ireland in 2015 and consist of loan-to-value (LTV) and loan-to-income (LTI) ceilings. The end goal of macroprudential policies is to ensure financial stability. This box does not assess how effective these policies have been in meeting this objective.

⁽²⁾ Central Bank of Ireland (2018) Review of Residential Mortgage Lending Requirements. Mortgage Measures 2018.

⁽³⁾ QUEST is the global macroeconomic model DG ECFIN uses for macroeconomic policy analysis and research. The version used in this paper comprises tradable goods, non-tradable goods and housing sectors. Detailed information on the QUEST model and its applications are available at: http://ec.europa.eu/economy_finance/research/macroecomic_models_en.htm.

- investment is currently envisaged to facilitate the delivery of **54,000 new social homes by 2021**. However, this might not be enough to cover all social housing needs (**currently 68,000 households on social housing waiting lists**). Construction of social housing gained momentum in 2019 with 8,172 units already completed and additional 14,549 homes under development in the third quarter of 2019. However, attaining the desirable level of social housing completions will

take time. While construction of social housing is progressing, a big part of the actual social housing needs is covered by [increased social welfare paid to private landlords]. A challenge posed by the rent supplementation schemes is that they might have an inflationary effect on the rental market – p.46

- The government's response to the **housing crisis** has included the introduction of Family Hubs – emergency accommodation for children and families who are homeless. In his critical evaluation of the Family Hubs, the Ombudsman for Children calls on the Irish government **to provide long-term social housing for children instead of emergency accommodation** – p.47
- [Ireland has committed to] retrofit 500,000 houses with increased energy efficiency and install 600,000 heat pumps – p.66

Box 4.3.2: Social housing policy and provision in Ireland

Residential property and rental prices continued to increase, making it more difficult for low-income households to buy a property or access affordable rental. Nation wide residential property prices have increased by 85.7% since early 2013, and by 94.9% from their February 2012 low in Dublin alone. Rental prices continued to increase both nationally and in Dublin in 2018. In the third quarter of 2019 (Q3 2019), the national standardised average rent stood at €1,243 a month, up 8.2% from a year earlier, while the average rent for Dublin was €1,762, an increase of €110 since Q3 2018 (RTB Rent Index).

Shortages in social housing have created a challenging situation. Social housing as a share of the total housing stock has decreased from 12.5% in 1981 to between 8% and 9% in recent years (Hearne and Murphy, 2017; Irish Council for Social Housing, 2019). Even though social home delivery has accelerated since 2015, there were still 68,000 households on social housing waiting lists and over 10,000 homeless people in Ireland in November 2019.

Policy measures to increase the supply of social housing are in place but their effectiveness is still limited. Rebuilding Ireland, the Government's 6-year action plan seeks to deliver over 50,000 new social housing units by 2021, through build, acquisition and leasing programmes thus meeting the housing needs of an additional 88,000 households through a housing assistance payment and a rental accommodation scheme. As of Q3 2019, the delivery of social homes has slightly exceeded its targets for each year since the launch of the action plan. If implementation continues according to plans, Rebuilding Ireland will provide social housing to over 73% of households on the current waiting list. For the timely delivery of homes to continue, all potential structural barriers need to be addressed (see Section 3 and below). Further efforts are needed to cover the needs of remaining households on the current list and of potential new applicants.

A more systematic re-assessment of individuals' rights for social housing might increase efficiency in allocating social homes. With a relatively high share of under-occupied social homes ⁽¹⁾ and increasing homelessness in Ireland, a regular re-assessment of needs, including in terms of home size, might make the market more efficient. It is important that strategic planning regarding the size of newly built social homes reflects on changes in family composition and builds on a lifecycle perspective. Furthermore, the geographical allocation of new social housing units might benefit from more coordination at national level.

The regulatory environment in the social housing market may become more stable with the enactment of the Housing (Regulation of Approved Housing Bodies) Act 2019. The Act provides for the establishment of a Regulator to oversee the effective governance, financial management and performance of Approved Housing Bodies. The legislation aims to safeguard public and private investment in the sector by providing further assurances to investors, tenants, and the Government that social housing providers operate in a well-regulated and stable environment.

⁽¹⁾ An under-occupied social house/flat is a unit deemed to be too large for the needs of the household living in it, in terms of excess bedrooms.

Italy

- **Access to affordable and adequate housing remains challenging due to the limited public investment** in the housing sector. As a result, the stock of social and public housing is one of the lowest in Europe – p.44
- The proportion of people living in **overcrowded households** is estimated at 27.8%, well above the EU average (15.3%). Moreover, the share of the population **unable to keep their home adequately warm** is very high (14.1% vs EU 7.3%) – p.44
- **A policy strategy to promote affordable housing is missing**, and in practice, third sector organisations often replace the public administration in providing housing services – p.44
- The **new minimum income scheme** includes a rent contribution, up to €3,360 per year. However, the strict eligibility criteria of the minimum income scheme often exclude the homeless and particularly foreigners, who represent the majority of homeless people in Italy, from receiving housing benefits – p.44
- The weak labour market conditions also have an impact on social outcomes. Gross disposable household income is still below pre-crisis levels. While the risk of poverty and social exclusion is declining, income inequality increased in 2018 (the S80/S20 indicator stood at 6.1). **In-work poverty has been steadily increasing** in recent years and stabilised at 12.2% in 2018 – p.46
- Italy performs well in a number of key environmental sustainability parameters...However, while firms seem to have taken more measures to address environmental concerns, **improving energy efficiency of households will be key** – p.60

Luxembourg

- **There has been limited progress in...increasing the housing supply**, including by increasing incentives and lifting barriers to build - p.5
- Households have high levels of debt compared to their incomes. **Rising household indebtedness stems in particular from increasing property prices**, as mortgage loans account for most of household debt. Increasing debt means that some lower income households may struggle to make ends meet if interest rates go up or if there is an economic downturn – p.6
- **Housing prices continue to increase**, driven by the large gap between demand and supply. Housing demand is influenced by dynamic population growth, benign financing conditions and a large cross-border workforce. **Housing supply and investment are insufficient**, largely due to a lack of incentives for landowners to build new housing and to an **insufficient supply of social housing** – p.6
- **The country is the EU's highest greenhouse gas emitter per capita**. With existing measures, it would fall short of its 2030 target for reducing greenhouse gas emissions. This highlights the considerable efforts needed to deliver on Luxembourg's climate and energy objectives, in particular in the transport and housing sectors – p.7
- **Soaring housing prices amplify inequalities, increase household indebtedness and may undermine Luxembourg's attractiveness**. Housing prices have been growing strongly, with affordability deteriorating, in particular for low-income households. This can be explained by insufficient land availability, high population and employment growth, a large number of cross-border workers with challenging transport conditions. **There is a broad consensus that the shortage of affordable housing presents a structural challenge in the economy** – p.14
- While significant investment appears necessary to alleviate tensions in the housing market, **measures to stimulate housing supply are under preparation**. These include more initiative planning regulations, **development of affordable and social housing**, land purchase by

the government for social renting, stronger tax incentives and support to municipalities. Nevertheless, supply remains limited and the challenge ahead for Luxembourg's authorities continues to be sizeable – p.18

- Household debt accounted for **174% of gross disposable income in 2018**, one of the highest levels in the EU, as housing prices, and mortgages, continue to rise faster than income – p.29
- **Valuation gap estimates point to a risk of [house] price overvaluation in Luxembourg.** Prices appear markedly above their long-term average when compared to the level of rents and income, with a gap of 51 % and 44 % respectively in 2018. This rather large overvaluation estimate contrasts with a negative model-based valuation gap estimate taking into account other fundamental variables. The overall house price gap calculated by the Commission, an average of the above indicators, **shows signs of an overvaluation of prices of 28%** - p.30
- **The Luxembourg government plans to review the legislative framework regarding social and affordable housing** to make it easier for municipalities and social housing bodies to use public land to build new units. The focus is expected to shift away from selling affordable housing towards increasing the supply of affordable rental housing – p.31
- **Housing costs represent an important burden for the most disadvantaged.** In 2017, the share of housing expenditures in disposable income of the 20% most disadvantaged households (first income quintile) was 42%, three times greater than that of the 20% of the wealthiest households (14.5 %, last income quintile) – p.38

Netherlands

- **Mortgage interest deductibility continues to fuel household debt.** Private debt is well above macroeconomic imbalance procedure thresholds...High household debt makes households vulnerable to shocks with macroeconomic repercussions. Although the ratio of household debt to GDP has been falling, it is still twice the euro area average. Household debt largely consists of mortgage debt and is fuelled by generous tax relief on mortgage interest payments. Despite the reduction in mortgage interest deductibility, **debt-financed home ownership remains heavily subsidised** – p.5
- Subsidies to owner-occupied housing and **social housing lead to an underdeveloped private rental market.** The (rent-controlled) social housing sector is large compared to other Member States. The private rental market is the only non-subsidised housing sector and remains underdeveloped. The lack of a well-functioning middle segment on the rental market encourages households to enter the owner-occupancy market early, leading to high debt-to-income ratios and potential financial vulnerability issues – p.6

Box 1.1: Nitrogen Ruling Implications

The Dutch Programmatic Approach to Nitrogen (*‘Programmatische Aanpak Stikstof’*, PAS) is a policy framework from 2015, which aimed to reduce the deposition of reactive compounds of nitrogen (¹) in Natura 2000 protected areas to prevent soil acidification and loss of biodiversity. PAS was used as the basis for granting construction and infrastructure permits in case of such emissions in anticipation of future reductions of nitrogen depositions. However, the Council of State (*‘Raad van State’*) annulled PAS as the basis for granting such permits on 29/5/2019 because of its incompatibility with Art 6 of Habitats Directive 92/43/EEC, as it failed to secure such future reductions ex ante. This subsequently led to a stop of new permits for projects around these protected areas, causing significant policy uncertainty for housing and infrastructure investment over the course of 2019. In part as a result of the nitrogen ruling, the number of granted building permits has dropped substantially, and some infrastructure projects are expected to experience substantial delays (Ministry of Infrastructure and Water Management, 2019). If unaddressed, the ruling could lead to an estimated cumulative reduction of 36 000 dwellings being realized up to 2024. Annual housing production in 2024 could drop to 65 000, as compared to baseline predictions of around 75 000 new dwellings a year (Ministry of the Interior, 2019; Koops and Manshanden, 2019). The government has therefore announced short-term measures that reduce emissions with the objective of improving the quality of the nature and re-enabling permit grants and the continuation of infrastructure and housing projects, although uncertainties remain (Ministry of Agriculture, Nature and Food Quality, 2019). As of yet, these measures concern: (i) a reduction of the day-time maximum speed on highways to 100 km/h; (ii) a voluntary buyout scheme for pig farmers; and (iii) a different composition of cattle feed. The government is considering structural measures for both permit grants as well as nature preservation.

- **The housing market upswing continues, albeit at a slower pace and with significant regional differences.** At national level, nominal house price growth slowed from 9% in 2018 to around 6% in 2019. In major cities, where the recovery in prices had been particularly steep, the market cooled more notably. This was especially the case in Amsterdam, where prices rose by about 3% over the course of 2019 – just slightly above inflation – following price rises of 10-15% per year since 2016. Nationwide, house prices are now around 12% above their pre-crisis peak although they remain somewhat lower in real terms, whereas in the largest cities prices are substantially above previous highs – p.34
- **While valuation indicators do not show clear signs of overheating at present, the risk that house prices exceed fundamentals appears to be rising.** At national level, the price-to-income ratio (a valuation indicator linked to housing affordability) rose to about 9% above its long-term average in Q3 2019. A model-based estimate still points to undervaluation based on 2018 data (although this is partly a reflection of relatively weak residential investment in the post-crisis period combined with low interest rates). Overall, with continued above-income price rises, **it appears increasingly likely that the housing market will re-enter overvalued territory.** This is particularly the case for regions where price growth has outstripped the national average and key indicators, notably the price-to-income ratio, appear more stretched. For Amsterdam, for example, econometric models do indeed suggest that price developments have already decoupled from fundamentals for several years – p.34
- **The private rental market is the only sector not receiving any subsidy**, and with a share of about 13% of the overall number of homes it remains relatively underdeveloped. This leads to poor availability of rental housing and high rent levels. As a result, **middle-income households – whose earnings are above the social-housing ceiling yet often insufficient to comfortably afford private-sector rents – can be pushed into (largely mortgage-financed) home ownership** – p.35
- **The housing supply continues to fall short of estimated needs, particularly in major cities.** Following the financial crisis, the Netherlands experienced a prolonged period of weak residential construction. This resulted in a significant housing shortage, **estimated by the Dutch authorities to**

- be around **294,000 homes in 2019**, equivalent to 3.8% of the overall housing stock. Shortages in large metropolitan areas are especially severe, amounting to 5-7% of the local housing stock – p.35
- **In September 2019, a package of further housing market measures was announced**, aimed primarily at boosting construction. Investment subsidies of up to €1 billion, distributed over a period of 4 years, will be made available to municipalities where shortages are most acute. A further €1 billion, spread evenly over 10 years, will be allocated to **targeted tax reductions for social housing corporations** building new homes – p.36
 - In May 2019, legislation was adopted to simplify the **market criterion ('markttoets')** for **social housing corporations**. This should allow them to engage in construction of mid-priced (non-regulated) rental housing more easily. However, against the current backdrop of strong private-sector development activity and capacity constraints in the construction sector, this appears unlikely to create significant incremental rental housing supply in the near-term – p.37
 - various policies support the electrification of transport, **energy-efficiency in housing and the deep renovation of neighbourhoods** with the aim of phasing out the use of natural gas by 2050 in the built environment. A key aspect of the climate agreement is linked to the regional energy strategies. These strategies will be developed by local governments and interest groups and will contain projects with local support in the areas of renewable electricity, heating for the built environment, and local infrastructure needs – p.61

Poland

- The housing loan market is expanding, but currently it does not pose a significant systemic risk. **The outstanding stock of housing loans in relation to GDP remains one of the lowest in the EU** – p.11
- **House prices continued to rise fast in 2019, but risks of overheating are limited...** Despite dynamic price growth in recent years, there is no evidence of house price overvaluation. In 2019, deflated house prices grew faster than real wages. However, the opposite was observed for several years before and, hence, real estate remains affordable in historical and EU-wide comparison – p.11
- Curbing greenhouse gas emissions through decarbonising power generation and reducing energy intensity are key challenges for Poland. Developing a coherent long-term vision for improving the environmental sustainability of Poland's development model is of crucial importance given the difficult starting point. Greenhouse gas emissions have increased slightly in recent years, especially in the transport sector. This puts Poland in the group of EU Member States with the highest emissions per capita – p.41

Slovenia

- **The strong increase in house prices since 2016 has been mainly driven by the lack of supply of residential buildings.** Since the summer of 2016, prices for residential buildings in Slovenia have been increasing strongly. In 2018, house prices recorded the highest pace of real growth since the financial crisis (7.4%, which is faster than wage growth), making Slovenia one of the euro-area Member States that registered the highest annual growth in house prices. The favourable economic situation and buoyant labour market have played a role, but the low level of investment in residential buildings was the major factor in pushing up house prices – p.10
- **House prices are still growing, but first signs of a slowdown were observed in 2019.** A gradual slowdown in the demand for residential buildings (due to diminishing affordability) and an

increase in construction have started to mitigate house price growth in 2019. It is expected that, with a further recovery in construction activity, **house prices will continue to moderate in the near future** – p.10

- On 1 November 2019, the Bank of Slovenia activated **binding borrower based measures to mitigate risks related to household lending**...placing caps on the maturity of consumer loans (7 years) and on the debt service-to-income ratio for all household loans. [Although,] The Bank of Slovenia has faced considerable public and political pressure to withdraw its macroprudential measures. – p.23-24

Spain

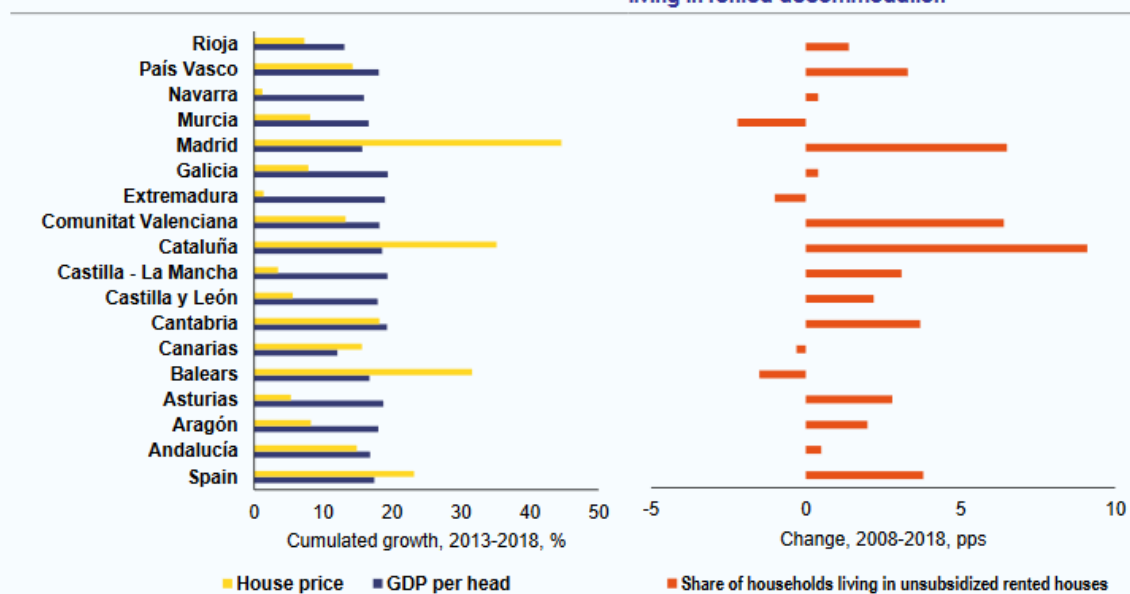
- **Growth in house prices has also started to moderate**, but it varies greatly across regions, with larger increases in the major cities and the coastal areas. On aggregate for the whole country, the valuation gap is closing. In big cities, the increased propensity to rent after the crisis created upward pressure on rental prices – p.12
- **The housing market keeps recovering**, but activity slowed down in 2019. House prices, after rising for the last six years, are starting to decelerate. Still, they increased by about 5% in the year up to Q2-2019. The valuation gap is closing for the country as a whole, but there is considerable heterogeneity across regions, partly **reflecting a still large stock of unsold houses in some areas and a buoyant rental housing market in others**. The recovery of house prices does not seem to imply potentially harmful dynamics, but price developments in some regions deserve attention, raising concerns about affordability – p.24
- The implementation of the 2015-2020 National Strategy against Homelessness, including **the development of the 'housing first' approach, has been limited and lacks synergies** with an overarching housing strategy. A legislative change in March 2019 strengthened the protection for vulnerable households at risk of eviction – p.61
- **Spain has adopted a national strategy to combat energy poverty**. In 2018, 9.1% of people were not able to keep their homes adequately warm, 1.1 pps more than in 2017 and 1.8pps above the EU average. The situation deteriorated particularly among people at risk of poverty (20.8%, compared to 19.4% in 2017), pointing to problems in the deployment of the social tariff. The 2019-2024 Strategy against Energy Poverty adopted in April 2019 aims to reduce the number of people affected by the different dimensions of energy poverty by at least 25% by 2025. This Strategy restricts the conditions for cutting the electricity supply and outlines a reform of the social tariff. **The political deadlock has impeded further development** – p.61
- In the absence of a coordinated national approach to the collaborative economy, local authorities in some areas have introduced **restrictions on short-term rentals** of accommodation and private-hire vehicles. These restrictions have been motivated by concerns about the availability of affordable housing and the protection of local communities and the environment – p.73

Box 4.2.1: Housing affordability in the recovery

After the sharp correction during the crisis, house prices increased again, driven by the recovery in housing demand amid strong job creation and low interest rates. Since the trough in 2013 up to 2018, cumulative house price growth in Spain was 23% (4.3% per year), higher than the growth of nominal GDP per head, at 17%. The deterioration in the price-to-income ratio – which can be considered a measure of housing affordability – at national level masks, nevertheless, sharp differences across regions. In most of them, GDP growth per head during the recovery has been higher than the increase in house prices, thus putting households in better conditions to buy a house (Graph 4.2.9.a). However, house prices went up much faster than GDP per head in some turistic areas such as Balear and Canary Islands, and in regions or cities with dynamic labour markets and high population density, like in Madrid and Catalonia.

Graph 4.2.9.a: GDP per head and house price growth

Graph 4.2.9.b: Change in share of households living in rented accommodation



Source: INE, European Commission.

The growing demand for accommodation in some areas has also affected the rental market. According to the house rent component of the Harmonised Consumer Price Index, during the recovery rents in Spain increased more slowly than in most other EU Member States. However, in the areas and cities mentioned above, where the housing market is more dynamic, new unsubsidised rents have increased faster, and more sharply than sale prices, despite some moderation in 2018. As shown by data on supply prices from web portals, in the period 2013 – May 2019, rental prices increased by 45% in Madrid and 50% in Barcelona, while in other big coastal cities they also grew by more than 40% (Bank of Spain, 2019c). In general, these are cities where there is also high demand for tourist accommodation, including in peer-to-peer vacation rentals in the historical city centers. Growth of rental prices was lower in less populated cities or inland Spain, though the increase was, in general, still higher than the growth of sale prices (Bank of Spain, 2019b). As a consequence, while sale prices have not reached their pre-crisis level in Madrid and Barcelona, rental prices have exceeded it.

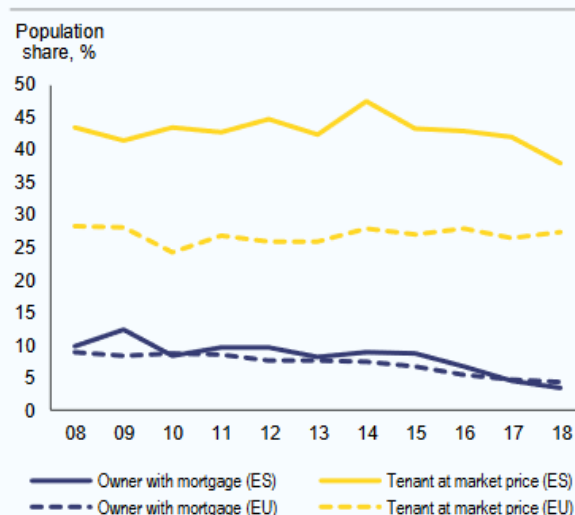
Since the crisis, Spanish households have increased their propensity to rent. The share of households living in a rented accommodation at market price increased by nearly 4 pps between 2008 and 2018 (see Graph 4.2.9.b), up to about 15%, ranging from 5.7% to 24.3% across regions. This increasing trend is also observed in other EU countries, where the share of tenants in the population (at 22% on average in the EU) is higher than in Spain. However, reflecting the pattern of house price and rent increases described above, the region of Madrid and Catalonia saw much higher increases in the share of people living in rented accommodation. By age groups, the increase is especially noticeable for young people: among households whose head is 16-29 years old⁽¹⁾, the share of tenants at market price was about 45% in 2018, while it was

only one third in 2008 (INE, 2019). The share of people living in rented accommodation at market price also increased among households with children, especially those with low income (below 60% of median income). The scar left by the burst of the housing bubble during the crisis is likely to be a key driving factor of the increased demand for rented accommodation, whereas the other drivers will differ across population groups. As to the role of policies, the abolition of the tax deduction for interest paid on mortgages for first-time house buyers in 2013 may have had the effect of encouraging demand for rentals.

Spanish people living in rented accommodation experience housing cost overburden more often than on average in the EU.

According to the EU-SILC survey, the share of population overburdened by housing costs – those paying more than 40% of their equivalised disposable income on housing – who are living in owner-occupied accommodation with an outstanding mortgage or loan has declined since 2008 (see Graph 4.2.10), especially in the period 2015-2018, thanks to the decrease in interest rates and the increase in disposable incomes. At 3.5% in 2018, this share stands just below the EU average. By contrast, for tenants renting at market price, this share has barely diminished in Spain, except in 2018, and at 38.1% in 2018, it is well above the EU average (27.4%).

Graph 4.2.10: Population with housing costs over 40% of their income



Source: Eurostat (EU – SILC), European Commission.

Ensuring the availability of affordable and quality housing is a fundamental need and forms part of the UN Sustainable Development Goals.

Several policy measures try to address this challenge across Europe, ranging from the supply of social housing, to housing subsidies and regulatory measures, including rent controls. The choice of policy instruments should be taken on the basis of the specific context in which they are applied and their implementation challenges and after careful evaluation of their expected impact and possible unwanted consequences – also based on past experience or international evidence. For example, while recent experiences with rent controls have improved affordability for tenants in the short term in the areas where they are applied, they have also increased prices in other areas. In addition, rent controls can reduce the supply of rental housing in the medium and long term and have undesired spill-over effects on housing market demand and prices (see Bank of Spain, 2020).

(¹) Including households with young people sharing a dwelling.

Sweden

- Sweden’s economy has performed well in recent years, but its subdued medium-term growth prospects call for further structural reforms. **A persistent housing shortage** is the result of demographic developments, insufficient new housing construction and inefficient use of the existing housing stock. Reforming the rental market and supporting construction, in particular in urban areas, could help address this shortage and support mobility and flexibility in the labour market. **Tax incentives favouring property ownership and mortgage debt are contributing to high household debt** and elevated house prices – p.4
- **No progress has been made on reforming the favourable tax treatment of mortgage debt and home ownership**, flexibility in the rental market and revising the design of the capital gains tax – p.5
- **Household debt as a share of GDP has stabilised at high levels.** Household debt grew by 6.1% in 2018, reaching about 88% of GDP and 176% of disposable income, which is among the

highest in the EU. This was driven mainly by higher mortgage borrowing linked to high house prices, coupled with structural distortions favouring mortgage-financed property purchases. **Sweden has implemented several macro-prudential measures in recent years**, including a strengthened repayment rule for high debt-to-income mortgages in force since March 2018 and increased the countercyclical capital buffer for banks from September 2019. However, the **policy steps taken so far appear to have had a limited overall impact** on the growth of mortgage lending – p.5-6

- **New construction does not meet housing needs**, particularly of affordable homes around major cities, where demand is growing. This shortage is linked to structural inefficiencies, such as a limited level of competition in the construction sector. **The housing stock is not being used efficiently**. In the rental market, below-market rents create lock-in and 'insider/outsider' effects while the vacancy rate has fallen to virtually zero. In the owner-occupancy market, capital gains taxes reduce homeowner mobility. **The housing shortage makes it harder for people to move location for a new job**, thus contributing to labour shortages, and can add to intergenerational inequality – p.6
- The high level of household debt and banks' exposure to real estate are **a risk to macroeconomic stability**. Despite gradual policy action, mortgage debt continues to grow – p.6
- **Household debt remains at historically high levels posing a risk to the economic outlook**. Household debt reached 176% of disposable income in 2018, with the ratio levelling off. In nominal terms, household debt increased by 4.8% year-on-year in the first three quarters of 2019, following a rise of 5.8% in 2018 – p.9
- It is difficult for young people, low-income groups, and newly arrived migrants **to find affordable housing**, particularly in the big cities – p.10
- when measured using the Gini-coefficient, income inequality has increased because of changes in relative incomes other than the lowest due to changes along the full range of incomes. In addition, **Sweden has experienced increased wealth inequality and, in particular, housing wealth inequality** – p.10
- **High house prices in combination with high household debt expose the Swedish economy to shocks**. House prices have risen significantly over the past two decades and remain high, despite a correction in 2017. **The overall estimate of the overvaluation gap is at around 30%**. Strong fundamentals, low interest rates, distortive taxation and supply side inefficiencies all contribute to the overvaluation. Because of the combination of high house prices and high private debt, the European Systemic Risk Board (ESRB) stepped up its warning and issued in 2019 a recommendation to Sweden to address these structural factors – p.18
- To partially address the continued shortage of housing supply, **the government has reinstated investment support for building rental apartments** (including for students) as part of the 2020 budget bill. This entered into force on 1 January 2020 with a budget allocation of SEK 2.1 billion, which should gradually increase to SEK 3 billion – p.19
- **Real house prices have grown faster than disposable income over the past 25 years**. The increase of about 200% outpaced house price rises in most other EU countries. House prices are most overvalued when compared with rents. Since the Swedish rental market is highly regulated, rents are on average below market rents and **waiting lists are long** – p.29
- **The opening gap between growth in house prices and income has increased the vulnerabilities of specific groups...** Using the difference between mean and median as a rough indicator for this development shows that for tenant-owned apartments, the median price increased 36 percentage points more than the mean between 2005 and 2017 – p.30

- **Building activity has fallen short of estimated needs for several years.** The National Board of Housing, Building and Planning projects an annual need of some 93,000 new home constructions for 2018-2020 and a need of 51,000 for the subsequent period to 2025. The effective housing supply, even at the peak in 2017, has fallen well short of the estimated short-term need and has only rarely met the structural, longer-term need – p.31
- **Residential real estate construction is forecast to shrink at a high rate in 2019 (-9.0% year-on-year) with a further decline in 2020 (-2.0% year-on-year).** Confidence surveys record falling orders and expectations are at the lowest level since the 2012 recession. New building permits and housing starts show a decline too – p.31
- **Structural hurdles tend to constrain housing supply and raise construction costs.** Developable land is not coming fast to the market and despite some reforms, zoning and building regulations, such as the varying interpretation of building rules by municipalities seems to fragment the market – p.31
- **In addition to shortage of supply, available housing does not fit households' needs...**the most pressing mismatch appears to be the size of households and the characteristics of the housing stock. Around 70% of Swedish households consist of no more than two people, but only 51% of the housing stock is non-rental multi-dwelling houses – p.31
- **The share of public housing for rent out of the total housing stock has declined from 23% in 2001 to 18% in 2018** while the vacancy rate for rental accommodation has dropped to a historic low of 0.5% and continues to be much lower than the EU average – p.32
- **The labour shortage is also affected by the housing market.** Almost one in five (19%) employers state that difficulties in finding accommodation affect the responsiveness to their recruitment offers – p.37
- **The demand for affordable housing is growing.** In 2019, 240 municipalities (of 290) had a housing shortage, particularly for low-income households in the rental sector. 221 municipalities also reported a shortage of housing for newly arrived migrants (particularly refugees) – p.41
- **While Sweden does not have social housing as such, in special cases the social services may be obliged to provide housing as social assistance** (emergency and more long-term housing solutions). Families with children and young people aged 18-29 with a low income, pensioners and people receiving activity assistance or sickness assistance can apply for housing benefit – p.41
- **The lack of affordable housing is a driver behind the increase in homelessness and housing exclusion.** In the latest count about 33,250 people lacked a permanent abode in Sweden. Almost 50% of these were in long-term housing arrangements (for instance municipal social contracts), whereas 650 people were acutely homeless, sleeping outdoors or in public spaces– p.41

United Kingdom

- **Housing investment.** Annual net housing supply has continued to rise but **planning permissions have levelled off and there are signs of a slowdown in new housing starts.** House building looks set to stabilise at a level below that which what would be necessary to meet estimated demand, due in part to capacity constraints in the construction sector – p.4
- **The availability and affordability of housing remains a major challenge.** The housing market has softened and real house prices are no longer growing. However, house prices and rents remain high in areas of high demand, and there are signs of overvaluation. Significantly fewer young

adults now own their own homes and this contributes to inequality between generations – p.5

- **The UK has announced a range of policy measures to increase housing supply.** Residential construction has risen in recent years, due both to a cyclical recovery and policy action, including major reforms to the planning system. Though real house prices have flattened, the cost of housing is particularly high in major urban centres and there is a structural shortage of housing in many parts of the country. The government has set itself the difficult goal **of increasing annual housing supply in England to 300,000 units** by the mid-2020s – p.15
- The UK has a persistent housing shortage. The availability and affordability of housing are a particular challenge in areas of high and growing demand, such as in and around urban centres – p.23
- **House prices and rents remain high, especially in areas of high housing demand.** The average UK house price was £235,000 (€268,000) in November 2019 (ONS, 2020a). The ratio of median house prices to median annual earnings remained at a record high of 7.8 in 2018 – p.23
- The Commission estimates that, on average, UK housing is around 20% overvalued. After tending to widen over time, the gap in prices between more expensive and cheaper areas has started to close slightly. Average house prices in each of Scotland, Wales and Northern Ireland are more than a third below the English level – p.23
- **In 1995-1996, 65% of those aged 25-34 with incomes in the middle 20% for their age owned their home. By 2015-2016 the proportion had fallen to just 27%.** The likelihood of young adults owning a house has also become much more dependent on their parents' level of property wealth, with negative implications for social mobility. At the same time, in addition to their high rates of owner-occupancy **a significant proportion of older households own additional properties from which they receive income from (usually younger) private renters** – p.24
- The cost of housing is linked to the high and volatile price of land with residential planning permission. **On average, 70% of the price paid for a UK home is now linked to the value of the land** (up from 50% in the mid-1990s) and only 30% to the value of the building itself, though this average masks significant spatial variation – p.25
- The government has implemented significant planning policy reforms. 'Fixing Our Broken Housing Market', set out four housing policy objectives:
 - i. increasing the supply of land available for house building;
 - ii. accelerating the rate of house completions;
 - iii. encouraging more diversity in the building industry;
 - iv. providing support to homebuyers
- The government is increasingly focusing direct public support for house building on areas with the highest housing demand and prices. **This includes the Affordable Homes Programme, which provides housing with different tenure types and rent levels, not just socially rented properties.** The Housing Infrastructure Fund provides £5.5 billion (€6.3 billion) by 2022-2023 to support the funding and planning of infrastructure linked to housing developments – p.26
- **The 'help to buy' scheme has accelerated home ownership for some households, but may have slightly pushed up house prices.** It is not yet clear how much impact this will have on the ground. Under the 'help to buy' equity loan scheme the government provides a loan of up to 20% (or up to 40% in London) of the purchase price of a house, with the government taking a commensurate equity stake in the property. The number of house purchases under the scheme has grown gradually since its launch, to over 52,000 in the year to June 2019 – p.26

- The UK has long had lower capital investment as a proportion of GDP than other G7 economies. **The UK has underinvested in housing, network infrastructure and capital equipment for decades** – p.38
- **The balance of infrastructure investment has recently shifted towards the public sector.** After decades of public sector under-investment, the government is starting to deal with the infrastructure deficit. New public sector infrastructure work grew by 45.7% in 2018 and it is now much higher than a decade ago. In contrast, the value of new private sector infrastructure projects fell by 15.9%. As a result, 2018 was the first year since 1996 that public projects made up the majority of new infrastructure work – p.40
- Given that energy-related emissions represent the majority of **the UK's total greenhouse gas emissions**, achieving further emission reduction will be key. In 2017, the largest share of energy-related emissions originated from the transport sector (34%), power and heat generation (25%) and **the residential sector (18%)** – p.46
- **The building sector will be key to meeting future energy efficiency and climate targets.** The UK housing stock will need to become more energy-efficient and fossil fuel heating systems such as gas boilers will need to be replaced by cleaner alternatives. In the short term, this entails the effective implementation of the revised Energy Performance of Buildings Directive. The government has recently consulted on a new 'Future Homes Standard' which would reduce energy consumption in new homes and require them to be fitted with clean heating technologies (such as air source heat pumps) rather than fossil fuel heating systems from 2025